Patient Cancer Information Seeking Preferences by Age and Source: A Comparison of the 2003, 2005, and 2007 Health Information National Trends Survey

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Abstract

Title: Patient Cancer Information Seeking Preferences by Age and Source: A Comparison of the 2003, 2005, and 2007 Health Information National Trends Survey

Purpose/Procedure:

Patient education enhances the patient's ability to actively participate in the healthcare decisions leading to an improved level of understanding. Modern technology provides society with access to a seemingly unlimited number of informative resources. Most Americans are bombarded with information from all angles; through newspapers, magazines, television, advertising, and especially the Internet. Therefore when an illness arises, a wide variety of information sources are readily available to most individuals. The rapid advancement of technology over the past decade has potentially created a generation gap in accessing information from the Internet. Older individuals may not have the same resources or skills as those in the younger generation in reference to obtaining electronic medical information.

The purpose of this retrospective, secondary data analysis of information obtained from the 2003, 2005 and 2007 Health Information National Trends Survey (HINTS) conducted by the National Cancer Institute (NCI) is to compare the frequencies of patient cancer information seeking preferences by age ranges and source to evaluate the self-reported trust level of the participants in reference to the medical information provided.

Results:

66% of participants claim to have never searched for cancer information in 2007, but 77% did search for some type of healthcare information. In 2003 the most common primary sources of cancer information were the Internet, books, and a healthcare provider. By 2007 the

library was cited as the most utilized source and a healthcare provider was one of the least cited sources.

Overall the participants aged 18 - 49 years were more likely to first search for medical information at the library, while participants aged 50 and above cited the Internet as a primary resource. As participants grew older, they were also more likely to seek cancer information from a healthcare provider, magazines, and the radio.

Participants who did seek cancer information appear evenly divided regarding concerns about the quality of the information sought. The most trusted source of cancer information was reported to be a doctor and the least trusted source was the radio.

Conclusions:

- Since 2003, patients have shifted to searching first in a Library or Book before the Internet.
- Healthcare providers and Magazines dropped from being one of the first searched places to one of the last.
- This study showed a trend of older age groups preferences to use the Internet as a primary source of information.
- The Library was used as a primary source for those 18-34 and 35-49
- As participants grew older, they were more likely to approach a healthcare provider.
- Participants showed the most trust in Physicians as a source.
- The least reliable source from the survey results was the Radio.
- The Internet evolved and changed in trust levels over the course of the 3 surveys.

Chapter 1

Introduction

Modern technology provides society with access to a seemingly unlimited number of informative resources. Most Americans are bombarded with information from all angles; through newspapers, magazines, television, advertising, and especially the Internet. Therefore when an illness arises, a wide variety of information sources are readily available to most individuals. Research has shown that many Americans access a variety of publications and websites when researching particular symptoms or pathologies (Hesse, Nelson, Kreps, Croyle, Arora, Rimer, and Viswanath, 2005). However, the rapid advancement of technology over the past decade has potentially created a generation gap in accessing information from the Internet. Older individuals may not have the same resources or skills as younger generations in reference to obtaining electronic medical information.

Many individuals claim to have conducted on-line searches regarding a particular disease or medical procedure but research suggests that they do not value that information as highly as advice given directly by a physician (Hesse et al., 2005). Studies were conducted between 1998-2003 assessing the methods individuals utilized to access health information via the Internet, yet the information gathered is almost a decade old (Gerber and Eiser, 2001; McClung, Murray, and Heitlinger, 1998; Baker, Wagner, Singer, and Bundorf, 2003).

Problem Statement

Little is known about age-related trends regarding an individual's preference for obtaining patient education materials in the current Internet age; therefore further research is necessary to help determine if generational differences exist in cancer information seeking

preferences. In addition, there has yet to be a determination of the confidence that individuals place on Internet sources in comparison to information obtained from their own healthcare provider or the accuracy of the information available on-line.

The purpose of this retrospective, secondary data analysis of information obtained from the 2003, 2005, and 2007 Health Information National Trends Survey (HINTS) conducted by the National Cancer Institute (NCI) was to compare the frequencies of patient cancer information seeking preferences by age ranges and source and to evaluate the self-reported trust level of the participants in reference to the cancer information provided. General medical information preferences were not assessed in HINTS until 2007. Originally the survey only asked about patient preferences regarding cancer information. Due to the limited wording and lack of consistency in the HINT survey over the various administrations, this study will focus on cancer information seeking preferences across all three administrations.

Review of Literature

A study of the 2003 HINTS responses was conducted by Hesse, et al (2005) to examine the trust patients have in a variety of health information resources. Over 6,000 patients were questioned about their habits regarding advice for their health, and while almost half of participants confirmed that they would rather go straight to their physician for advice, only 10% actually first discussed the situation with their physician. Of those patients questioned, 48% reported they searched for information on-line prior to discussing the issue with their physician. The results of this study only included participants who responded that they "had gone online to access the Internet or World Wide Web, or to send and receive e-mail", thus limiting the application of the study to only those who have claimed themselves to be Internet savvy. This

research was conducted utilizing information collected in 2003; however the authors suggest that the steady increase in Internet usage among Americans could potentially have an effect on the data they obtained from their study (Hesse et. al., 2005)

Gerber and Eiser (2001) discuss the changes in the patient-physician relationship due to both groups having access to the Internet. This study suggests that patients are using the Internet to seek medical information as opposed to gaining all of their knowledge solely from their healthcare provider. They claim that the Internet provides benefits in terms of treatment and patient education, although they do suggest that one disadvantage is that many individuals cannot decipher whether a particular Website is legitimate offering credible information. This could pose potential problems in the future if physicians assume that patients already have a general knowledge about their disease and therefore do not fully explain everything to patients who may not have access to such medical materials. The differences in interactions between the patient and physician are discussed, suggesting that physicians must be open to active discussion and not feel threatened by patients questioning or challenging the professional. The authors cite the results of a survey of 1084 physicians performed by Barrett (2001) which demonstrated that the majority of physicians responding did not believe it was good for patients to obtain medical information from the Internet. Various reasons for this aversion to the Internet are speculated, including the cost of computer access, concern regarding the accuracy of available information, and concern that physicians may be held liable for the information obtained through Internet research. Regardless of who is accessing medical information on-line, there is a constant need to maintain accuracy and credibility when conducting an Internet search. One way of achieving this is for the physician to recommend sites that are trustworthy to provide relevant information for their patients needs, as 75% percent of patients in Gerber and Eiser's (2001) study confirmed

they would trust a site recommended by their physician. The authors also comment on the lack of research studies conducted on individuals without Internet access. They suggest the need for greater interest in providing computer literacy to the underprivileged and the potential for these populations to be forgotten as the technological world advances forward (Gerber and Eiser, 2001).

Baker, Wagner, Singer, and Bundorf (2003) conducted a survey in order to determine the extent to which the Internet is used for obtaining health information. Their study included 4764 participants over the age of 21 who had Internet access prior to participation in the survey. The authors estimate that 40% of the U.S. adult population with Internet access used the Internet to search for health information at the time the study was conducted. They note that in 2001, only half of the U.S. population had Internet access; therefore, in 2001, approximately 20% of the U.S. adult population utilized the Internet to find health information. Although these findings vary from reports with much higher percentages of people using the Internet for health information (Fox S, Rainie L, Horrigan, 2000, and Horrigan and Rainie, 2002), the research conducted by Baker et. al. included a sample more representative of the U.S. population as opposed other studies which recruited participants via the Internet. The authors also mention that they found the use of the Internet to obtain health information had very little effect on a participant's usual phone or personal communications with their physician (Baker et al, 2003).

Smart and Burling (2001) conducted a systematic review of radiology related patient information resources identifying 28 Websites pertinent to patient information in radiology using four different search engines. Each site was evaluated on the thoroughness and accuracy of information provided regarding patient preparation, procedural contraindications, procedural complications and risks, post-procedural care, results availability, links to other relevant sites,

visual support for text, and contact address of the authors of the site (Smart and Burling, 2001). The authors concluded that the Internet has the capability to provide patients with educational materials which will provide a good understanding of medical imaging procedures and their accompanying consequences, however the increasing public demand for quality information via the Internet can potentially be compromised due to lack of regulation and the infrequent use of peer-review of the material presented (Smart and Burling, 2001).

According to a 2003 study conducted by the United States Census Bureau (Day, Janus, and Davis, 2005), 62% of American households had at least one computer and about 55% had access to the Internet. The likelihood of owning a computer with Internet access decreased with age, but increased with household income. Internet and computer usage for searching health information increased from 11.5% in 1997 to over 32% in 2003. This trend has most likely continued over the past 6 years due to continued technologic improvements and the widespread Internet access through publicly available computers and wireless devices. According to the 2007 US Census Bureau's survey, 71% of Americans have Internet access, with the most likely users being under 55 years of age (US Department of Commerce, 2007).

Objectives

The widespread use of the Internet and other readily available media resources may have caused a shift in medical information seeking behavior and the perceived trust of the various sources of information. This applies to all individuals employed in healthcare because patients are becoming increasingly insistent on having a good understanding of conditions, procedures and their consequences. The availability of high quality information on the Internet will aid in

disseminating accurate patient education and knowledge of medical procedures (Smart and Burling, 2001).

The purpose of this study was to assess trends in medical information seeking preferences, by age and source; and the level of trust by information source, from data collected in the 2003, 2005, and 2007 HINTS surveys. The results of this study will help validate existing research conducted by Hesse et al. (2005) and Carlsson (2000) which indicate a relationship exists between various demographic factors and patient information seeking behaviors. Technological advancements have led to an increase in the frequency of Internet usage by the U.S. adult populations from 63% in 2003 to an estimated 75% according to the Pew Internet and American Life Study (Fox and Vitak, 2008). These findings are supported by similar trends reported by the US Census Bureau (Day et.al., 2005 and US Dept. of Commerce, 2007). Increased Internet usage may suggest a change in the way in which medical decisions are discussed, and demonstrate a need for educating patients regarding credible Internet resources. Healthcare providers also must remain cognizant of the potential digital divide to ensure older patients continue to obtain necessary information, because they may continue to depend heavily upon their healthcare provider to supply the appropriate information.

Research Question

1. What are the trends in cancer information seeking preferences, by source, between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?
2. What are the trends in cancer information source preferences, by age, between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?

3. What are the trends in the level of trust of medical information obtained, by source between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?

Chapter 2

Methodology

This study was a retrospective, secondary data analysis utilizing information from the 2003, 2005, and 2007 Health Information National Trends Survey (HINTS) conducted by the National Cancer Institute (NCI). HINTS is a longitudinal study, with surveys conducted in 2003, 2005, and 2007, to allow the NCI to monitor changes and trends in patient communication and information acquisition over a period of time (Hesse et al., 2005). Specific information about the 2003 survey conducted by the NCI has already been published (Nelson, Kreps, Hesse, et al., 2004). This study will evaluate the most current information obtained from the 2007 survey administration and compare findings to those from the 2003 and 2005 surveys.

Population and Sample

The study was conducted comparing the publicly available data from the 2003, 2005, and 2007 Health Information National Trends Survey (HINTS) conducted by the National Cancer Institute (NCI). HINTS is a nationally representative survey of the American population which includes adults 18 years of age or older. Ohio State University IRB approval was granted prior to beginning the study. The target population of this study is the estimated U.S. adult population with a random sample drawn using a random digit dial telephone survey and a random sample of selected U.S. postal addresses. Data was collected from 4,092 individuals via phone and 3,582 individual via the mailed survey for the 2007 survey. The sample for this study consists of those respondents who indicated they actively look for information about health or medical topics which resulted in a total sample size of 3,577 from 2007. Data from the 2003 survey included a total sample size of 6,359 people and the 2005 HINTS included 5,572 people.

Design

This retrospective data analysis is a descriptive study and was conducted assessing frequencies published and publicly available as data from the HINT survey. The demographic ranges used for this study corresponds to those identified in the 2003, 2005, and 2007 HINTS. The age ranges evaluated are: 18-34; 35-49; 50-64; 65-74; and 75+ years of age. The medical information resources that were evaluated are: healthcare provider or organization, family and friends, printed materials, radio, television, and the Internet. The collection method employed by HINTS resulted in certain groups being oversampled. Therefore data was altered using weighted analyses provided by HINTS to increase the sample of participants who were under-sampled. If left unweighted the HINTS analyses would have too many African Americans and Hispanics, too many 45+ and too few 18-34 year olds, too many females, and too few males. Thus the weighted results of this study are based on a nationally representative sample of the US population participating in the HINT survey.

Data Analysis

Descriptive statistics were conducted using SPSS 17.0 to summarize the HINTS information collected in 2003, 2005, and 2007. Frequency distribution, percentages, and variability are presented using frequency tables and bar graphs demonstrating the patient information seeking preferences for each age range and patient level of trust in the information obtained, by source in 2003, 2005, and 2007. Trends in the medical information seeking behaviors and trust levels of the information, by age and source, are highlighted and discussed. The questions placed on the survey by the National Cancer Institute limited the type of analysis which could be conducted across all three administrations of HINTS. The 2003 and 2005

surveys included questions specific to cancer information. Therefore an analysis could only be conducted to determine source preference trends over time specifically in reference to seeking cancer information, not general healthcare information. Questions relating to source preferences for healthcare information were only included in the 2007 HINTS administration.

Chapter 3

Results

1. ***What are the trends in cancer information seeking preferences, by source, between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?***

When participants were asked by the National Cancer Institute's administration of the 2003 HINT survey if they had ever looked for cancer information, 47.4% answered "yes" while 52.6% answered "no." In the 2005 survey, responses indicated a more equal distribution with approximately 50% of the population answering "yes" and approximately 50% of the population answering "no." However, result from the 2007 survey indicates a shift in responses specific to cancer information with 61% responding they had never looked for cancer information [Table 1]. Although these 61% claimed to never have looked for information about cancer, the same group responded in 2007 that 77.2% had searched for healthcare information in general [Table 2]. When questioned about the first place participants searched when looking for cancer information the majority in 2003 reported the Internet (48.7%) followed by books (13.8%) and their healthcare provider (10.5%) with television, radio, 1-800 numbers, and cancer organizations all being the least likely source of primary information (under 1.0%). In 2005, the first source used to find cancer information was reported to be the library (46.7%) followed by the Internet (23.1%) and then books (9.1%) with the least turned to sources being radio, 1-800 numbers, and cancer organizations. The library continued to gain popularity as a source of cancer information in 2007 with 55.3% of the respondents listing this resource as their first choice in seeking information. The second choice was the Internet at 24.5%, followed by books at a distant third (6.6%). Healthcare provider,

magazines, radio, 1-800 numbers, and cancer organizations were the least utilized sources (<1.0%) in the 2007 survey results [Table 3].

FINDINGS: 66% of participants claim to have never searched for cancer information in 2007, but 77% did search for some type of healthcare information. In 2003 the most common primary sources of cancer information were the Internet, books, and a healthcare provider. By 2007 the library was cited as the most utilized source and a healthcare provider was one of the least cited sources.

2. What are the trends in cancer information source preferences, by age, between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?

Information from the questions collected regarding medical information seeking preferences were then analyzed by age groups as defined by the National Cancer Institute's HINT survey. The 18-34 year olds, and 34-49 year olds all reported that their first source of cancer information would be the library followed by the Internet and books, with their least likely place to look being television, radio, 1-800 numbers, and cancer organizations. The older age groups (50-64, 65-74) responded that the Internet was their first source of information followed by the library and books, with their least likely source of information being television, radio, 1-800 numbers, and cancer organizations. The 75+ age group reported to use the Internet most often as their first source of information (40.9%) with books and the library at around 10%. This oldest age group had similar findings to the younger groups in regards to least used sources except that the radio was ranked as a source of information more often in the oldest age group [Table 4].

FINDINGS: Overall the participants aged 18 - 49 years were more likely to first search for medical information at the library, while participants aged 50 and above cited the Internet as a primary resource. As participants grew older, they were also more likely to seek cancer information from a healthcare provider, magazines, and the radio.

3. What are the trends in the level of trust of medical information obtained, by source between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?

Participants were asked if they were concerned about the quality of the information received from their search for cancer information and most responded "somewhat" over all three surveys, however the difference between "somewhat concerned" and "not at all concerned" in 2005 was only 0.2%. The numbers were about evenly divided between participants being concerned (56% in 2003, 47% in 2005, and 52% in 2007) and not being concerned [Table 5].

In terms of the quality of information obtained, participants were asked specifically how much they would trust cancer information from a variety of common sources. In 2003, 2005, and 2007 about 67% responded that they would trust information received from a doctor "a lot" [Table 6]. Trust in the Internet remained fairly stable across all three with around 20% stating "a lot", 50% responding "some" trust, 17% trusted the source "a little," and 13% "not at all" [Table 7]. When asked about how much they would trust information from friends and family about 20% said "a lot" and 45-50% said "some" in 2003 and 2005 but in 2007 those numbers change to 50% responding "some" trust and only 9% would trust friends and family "a lot" [Table 8].

Again in 2003 and 2005, participants roughly agreed when asked how much they would trust newspapers and magazines for cancer information with about 15% of participants claiming "a lot," 50% responded "some" , 23% said "a little," and around 10% "not at all". In 2007, the trust of newspapers and magazines declined with only 4% saying they would trust them "a lot," 43% responding "some", 41% "a little", and 12% "not at all" [Table 9]. Radio, similarly to newspapers, showed to have more trust from participants in 2003 and 2005 when 45% said they had "some" trust in radio as opposed to 2007 when the response shifted to 45% claiming they had only "a little" trust [Table 10]. Television was also consistent with the responses for trust in cancer information from newspapers, magazines, and radio. The response from 2003 and 2005 showed 20% trusted television "a lot", 51% had "some" trust, 22% only "a little" trust, and 6% said "not at all". In 2007 television was reportedly trusted less by participants with only about 6% saying they trusted it "a lot," 35% "some," 42% "a little," and up to 17% said they did not trust it at all [Table 11].

FINDINGS: Overall, participants who did seek cancer information appear evenly divided regarding concerns about the quality of the information sought. The most trusted source of cancer information was reported to be a doctor and the least trusted source was the radio.

Discussion

In searching for trends in medical information seeking preferences, by source, from 2003 to 2007 it was expected that patients would increasingly utilize the Internet as a primary source, due in part to easier access to this resource. However, a longitudinal analysis of the data

collected in HINTS demonstrates that about half of Americans looking for information specific to cancer had looked to the Internet first in 2003, but by 2005 and 2007 it was becoming increasingly popular to first look in the library and consult books for information. In 2005, Hesse et. al. reported that 48% of participants reported using the Internet as a source of information before asking a healthcare provider, and the authors predicted this number would increase with time as the Internet increased in accessibility and popularity. The data obtained from the HINT surveys administered in 2005 and 2007 actually showed a decrease in Internet usage (23% in 2005 and 24.5% in 2007) as a source of medical information with an increase in the use of libraries and books for informative searches. . With the increasing popularity and availability of the Internet during this timeframe, perhaps this trend indicates concern regarding the reliability of Internet sources. The research conducted by Hesse et. al. (2005) found confirmation in this HINTS analysis which showed participants did report having less trust in Internet resources than in a doctor. Trends from HINTS indicate many people are looking to the Internet as one of their primary resources of cancer information, further emphasizing the need for this information to be reliable or recommended by a physician.

Most notable of the results were the trends in use of healthcare providers as a primary informative source. In 2003 healthcare providers were rated as one of the most common sources and by 2007, they were rated as one of the least common resources for medical information. Research previously conducted by Baker et al (2003) suggested that patients taking advantage of the medical information available on the Internet had no substantial effect on their communications with a physician. This HINTS analysis showed a decrease in the use of a healthcare provider as a primary source of medical information as the use of the Internet increased. This result may be due to patients already gaining information from the Internet that

they would have received from their physician, or it could be due to older patients not having the access or mobility to visit a physician and relying more on the Internet because it is easy to access. More research is necessary in order to determine the extent and reasoning of this trend.

Magazines lost their status as a primary source for information across the sampled years along with the Internet. While participants responded most often they are somewhat concerned with the quality of the information they are searching for, there was almost a 50/50 split each year between the amount of "definitely/somewhat concerned" and the number of "not really/not at all concerned" responses. This may show that people are not exactly looking in an attempt to find the correct answer, but searching just to investigate what kind of information is available and then determining for themselves the accuracy of this information. With the ease of Internet usage, and the ability for anyone regardless of credentials to post healthcare information, the population may be becoming increasingly skeptical about reliability of sources.

In terms of age differences, 2007 results indicate that older populations are more comfortable with the technological advancements and the availability of information on the Internet as compared to past surveys. As the age of the respondent increased, their likelihood of using the Internet as their first source for cancer information increased from the 2003 and 2005 survey administrations. In contrast, however, younger participants seem to have less confidence in the Internet and opted toward more traditional sources such as the library. Older generations tend to have more challenges with mobility than younger people and this difficulty may be the reason for relying more heavily on the Internet which can be used from the comfort of their home. The 2007 survey conducted by the US Census Bureau (Fox and Vitak, 2008) showed that the most likely Internet users were under the age of 55 years. This HINTS analysis showed that the age group which used the Internet the most to search for cancer information was the oldest

group of 75 years and older. Those respondents aged 18-34 indicated the largest preference for using the library as the first source for information. This may be explained by the large number of individuals in this age group who are still students and have a school library easily available and nearby. The 75+ age group also showed more of a preference for radio than younger groups, likely due to their past of living in a time when there was no television or Internet and radio was a very trusted source of information. More research is necessary to determine the reasoning for these generational shifts in information sources.

When analyzing the amount of trust participants placed in different sources of cancer information, the only source to report the majority of respondents having "a lot" of trust in the source was a healthcare provider. This is understandable considering the amount of training and years of experience that healthcare providers can attribute to a situation, but leaves us to question why then were healthcare providers not the first place participants would look for medical information? In fact, healthcare providers were one of the least sought after sources of medical information for the 2007 HINT survey. There are a large number of possibilities for this result ranging from availability of a healthcare provider, to whether or not the patient will be charged an additional fee, to fear of asking an unintelligent question.

Limitations and Further Research

The results are limited significantly by the questions asked in HINTS each year. Many questions relevant to the study were asked in a single survey year but not repeated in subsequent years and therefore not available for comparison over time. Even those questions which were repeated in more than one survey were sometimes worded to be specifically cancer related in earlier years and changed to more general questions later on. For future studies, the National

Cancer Institute should maintain consistent topics and wording of the questions in HINTS in order to enable comparison studies.

Further studies could investigate the reasoning for the differences in Internet usage to search for healthcare information among various age groups. The older generations are relying on Internet sources more often, which may also be less reliable sources, and it needs to be determined how to ensure these groups are receiving appropriate and accurate information regarding their health. Other research regarding the trust level of different sources of information could be extremely helpful to ensure that the places patients are looking for information is also the most reliable. The 2007 HINTS demonstrates that although participants place the most trust in advice from a physician, they were not the first or most likely source to be consulted. Research may be conducted to determine why patients do not seek information from their physician more often and how to make professional medical advice more readily available when needed.

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Tables and Graphs

1. What are the trends in cancer information seeking preferences, by source, between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?

Have you ever looked for cancer information?

			Year			
			2003	2005	2007	Total
Yes	% within Year	Estimate	47.4%	48.7%	39.0%	44.9%
No	% within Year	Estimate	52.6%	51.3%	61.0%	55.1%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 1

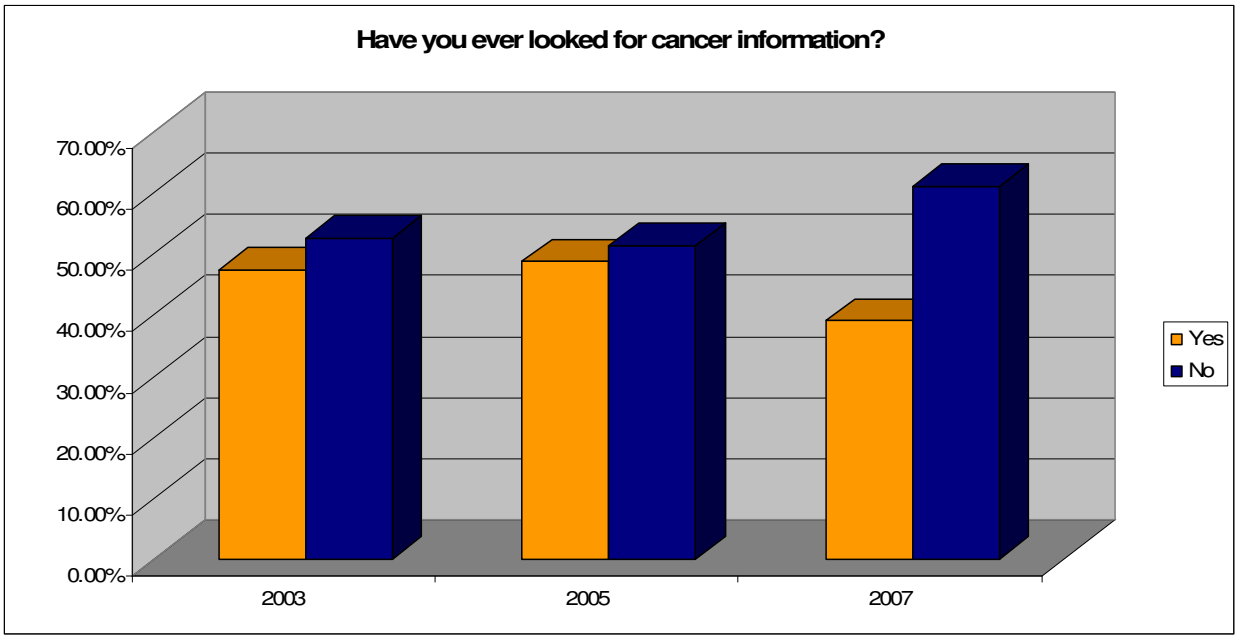

Figure 1

Have you ever looked for information about healthcare from any source?

			Year	
			2007	Total
Yes	% within Year	Estimate	77.3%	77.3%
No	% within Year	Estimate	22.7%	22.7%
Total	% within Year	Estimate	100.0%	100.0%

Table 2

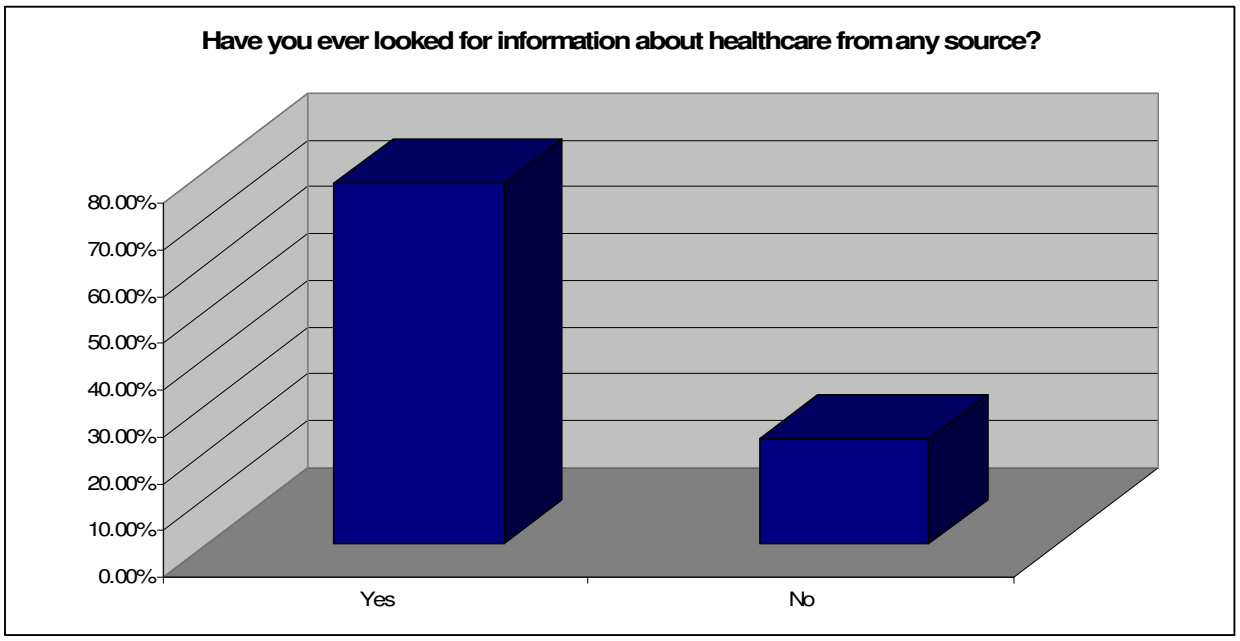

Figure 2

Where did you look <u>FIRST</u> for cancer information?(By Year)

			Year			
			2003	2005	2007	Total
Books	% within Year	Estimate	13.8%	9.1%	6.6%	9.9%
Brochures, pamphlets, etc.	% within Year	Estimate	4.1%	1.9%	4.6%	3.4%
Family	% within Year	Estimate	1.4%	1.8%	1.4%	1.5%
Friend/co-worker	% within Year	Estimate	1.5%	2.7%	2.3%	2.2%
Health care provider	% within Year	Estimate	10.5%	1.9%	.6%	4.3%
Internet	% within Year	Estimate	48.7%	23.1%	24.5%	31.9%
Library	% within Year	Estimate	6.2%	46.7%	55.3%	36.1%
Magazines	% within Year	Estimate	6.9%	5.4%	1.0%	4.6%
Newspapers	% within Year	Estimate	2.6%	3.0%	2.1%	2.6%
Radio	% within Year	Estimate	.0%	1.3%	.5%	.6%
Telephone information number (1-800 NUMBER)	% within Year	Estimate	.2%	.3%	.2%	.2%
Cancer organizations	% within Year	Estimate	.5%	.2%	.3%	.3%
Television	% within Year	Estimate	1.0%			.3%
Other (specify)	% within Year	Estimate	1.4%	.9%	.4%	.9%
Not ascertained	% within Year	Estimate	.2%	1.1%		.5%
Refused	% within Year	Estimate	.0%	.1%		.0%
Don't know	% within Year	Estimate	1.0%	.6%		.6%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 3

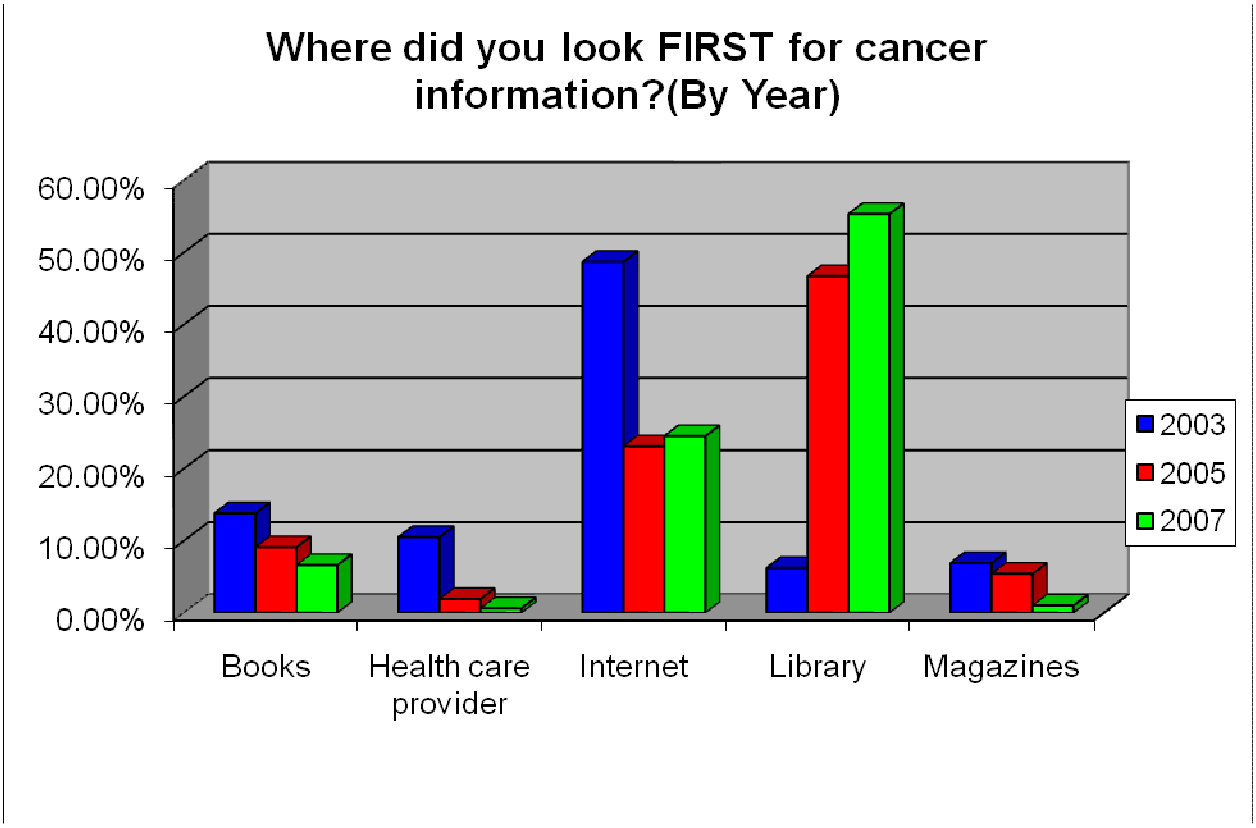
Where did you look FIRST for cancer information?(By Year)
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Books
Health care provider
Internet
Library
Magazines
2003
2005
2007

Figure 3

2. What are the trends in cancer information source preferences, by age, between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?

Where did you look FIRST for cancer information?(By Age)

	18-34	35-49	50-64	65-74	75+	45+, exact age refused	45+, exact age unknown
Books	9.2%	8.7%	10.9%	12.0%	10.1%	58.4%	4.8%
Brochures, pamphlets, etc.	1.5%	3.7%	3.6%	5.4%	8.0%	4.2%	.0%
Family	.8%	1.2%	2.0%	2.9%	2.5%	1.5%	.0%
Friend/co-worker	2.8%	1.8%	1.9%	2.3%	2.5%	3.3%	.0%
Health care provider	2.4%	4.8%	4.5%	7.0%	6.7%	.0%	.0%
Internet	29.6%	31.0%	32.8%	34.6%	40.9%	25.7%	76.0%
Library	47.1%	38.5%	32.2%	20.2%	9.3%	4.2%	10.2%
Magazines	3.7%	4.7%	4.9%	4.7%	6.6%	.0%	8.9%
Newspapers	1.2%	2.4%	2.7%	5.2%	6.3%	.0%	.0%
Radio	.1%	.6%	.8%	.7%	2.2%	.0%	.0%
Telephone information number (1-800 NUMBER)	.2%	.2%	.4%	.4%	.0%	.0%	.0%
Cancer organizations	.1%	.3%	.5%	.2%	.5%	.0%	.0%
Television	.3%	.2%	.4%	.6%	.4%	.0%	.0%
Other (specify)	.5%	1.3%	.9%	1.1%	.6%	.0%	.0%
Not ascertained	.2%	.4%	.6%	1.1%	.9%	.0%	.0%

Table 4

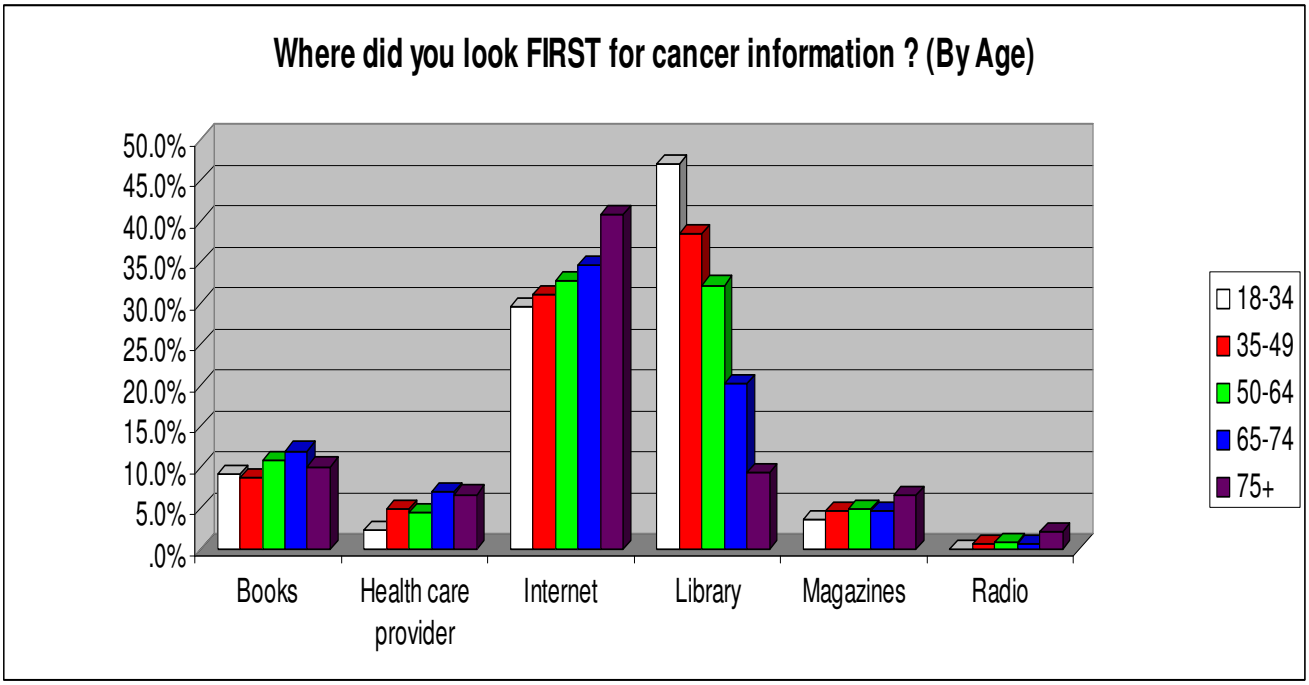

Figure 4

3. What are the trends in the level of trust of medical information obtained, by source between data obtained from the 2003, 2005, and 2007 administration of the HINT survey?

Were you concerned about the quality of information?

You were concerned about the quality of the info?			Year 2003	2005	2007	Total
Strongly agree	% within Year	Estimate	21.3%	19.6%	16.1%	18.5%
Somewhat agree	% within Year	Estimate	35.1%	27.3%	36.1%	33.3%
Somewhat disagree	% within Year	Estimate	24.2%	24.8%	25.8%	25.1%
Strongly disagree	% within Year	Estimate	18.3%	27.1%	22.1%	22.5%
Refused	% within Year	Estimate	.3%	.1%		.1%
Don't know	% within Year	Estimate	.8%	1.1%		.5%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 5

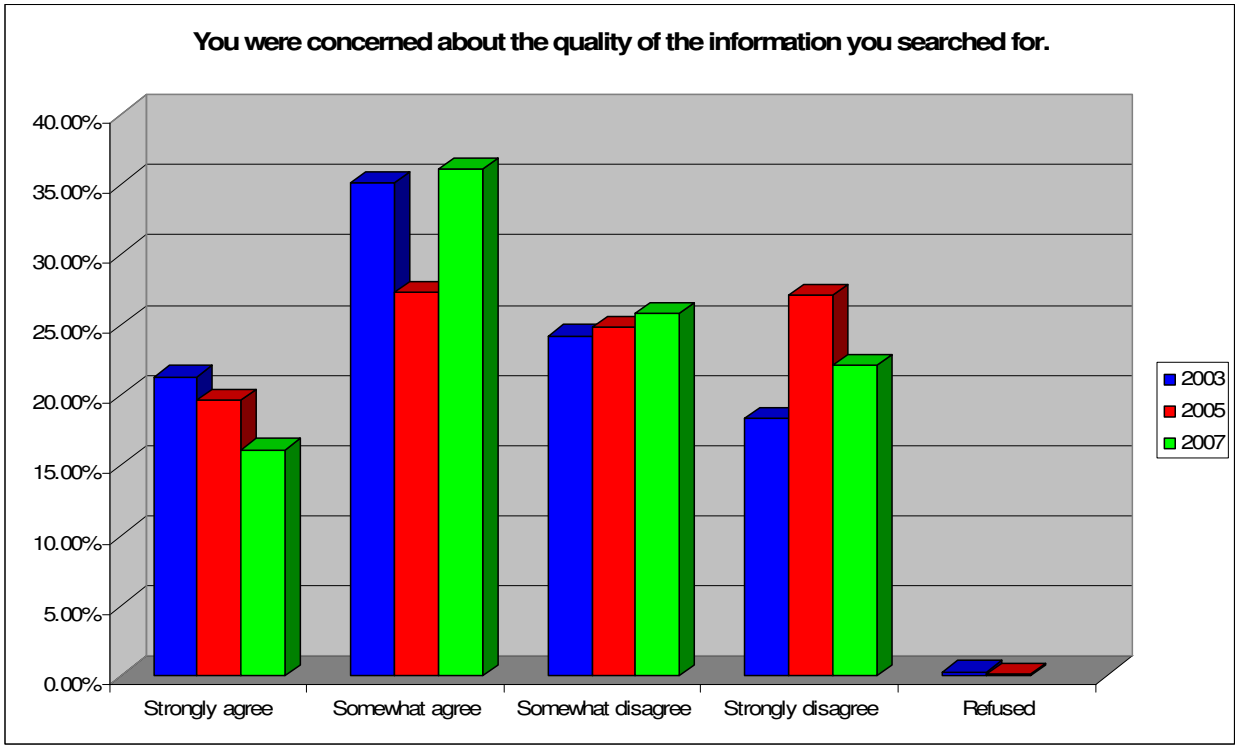

Figure 5

How much would you trust cancer information from a doctor?

How much would you trust cancer info from a doctor?			Year			
			2003	2005	2007	Total
A lot	% within Year	Estimate	63.2%	67.2%	69.6%	66.8%
Some	% within Year	Estimate	30.4%	24.8%	27.0%	27.3%
A little	% within Year	Estimate	4.9%	6.5%	3.1%	4.8%
Not at all	% within Year	Estimate	1.5%	1.6%	.4%	1.1%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 6

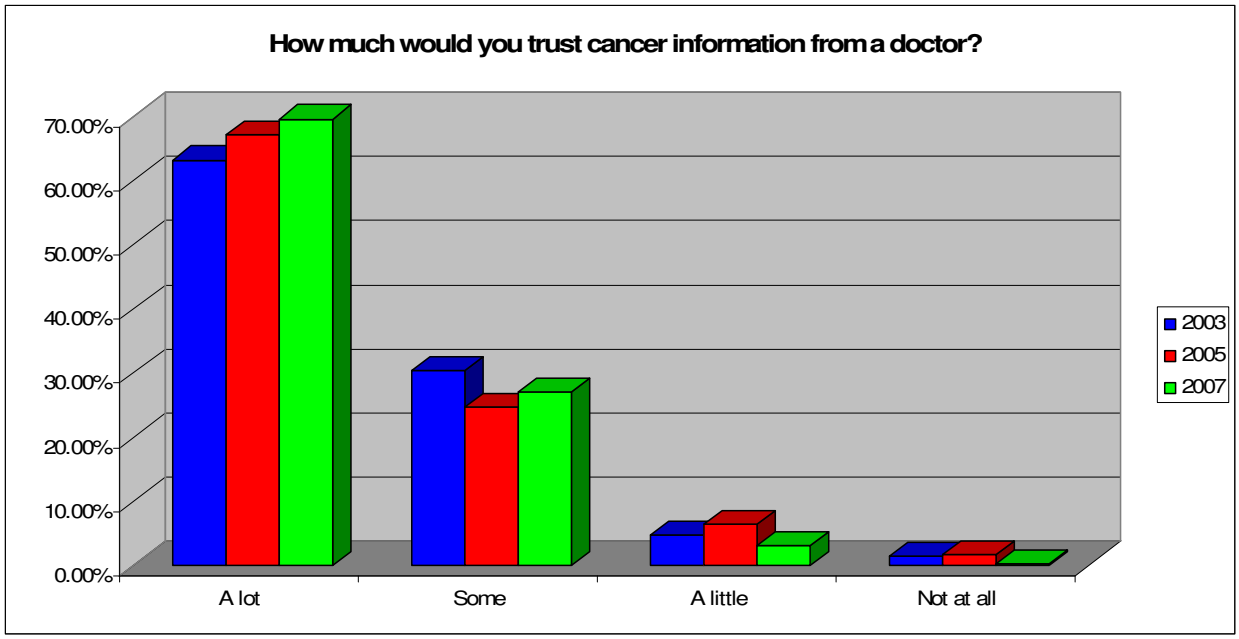

Figure 6

How much would you trust cancer information from the Internet?

Trust cancer info from the internet?			Year			
			2003	2005	2007	Total
A lot	% within Year	Estimate	24.2%	18.9%	19.4%	21.0%
Some	% within Year	Estimate	42.8%	53.8%	53.2%	49.5%
A little	% within Year	Estimate	12.1%	21.0%	18.7%	16.8%
Not at all	% within Year	Estimate	20.9%	6.3%	8.6%	12.6%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 7

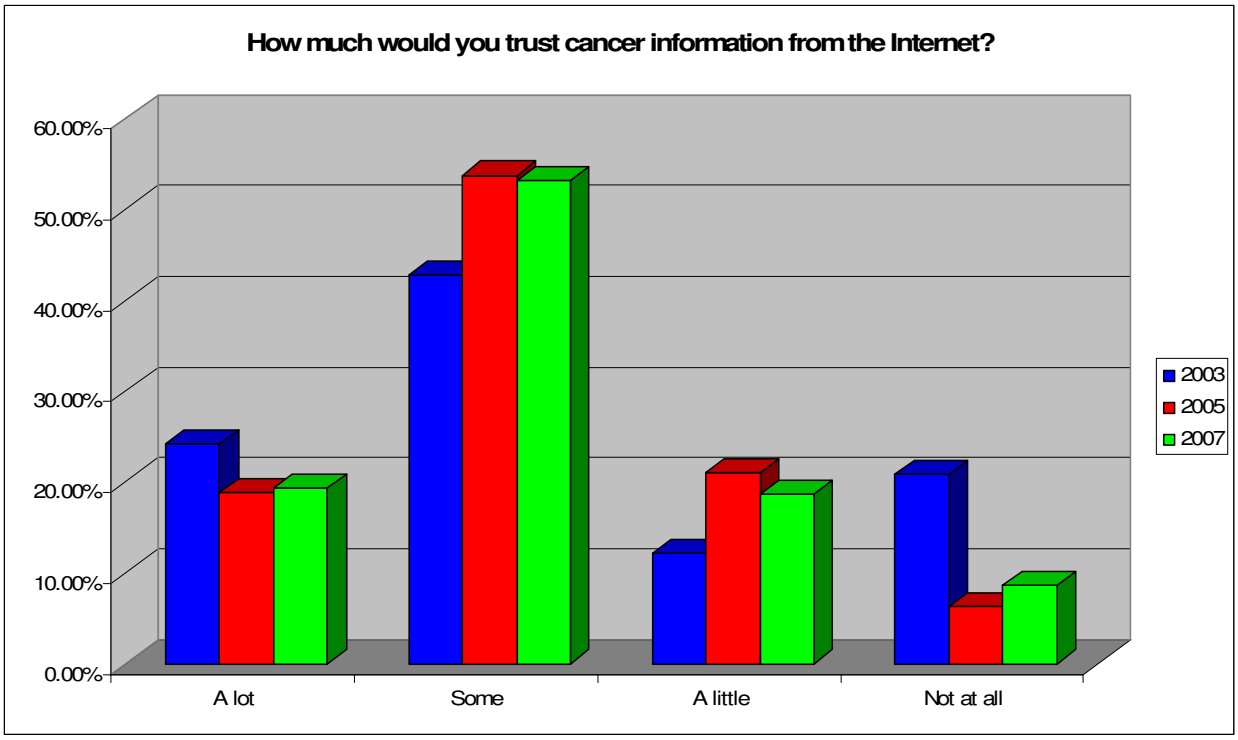

Figure 7

How much would you trust cancer information from friends and family?

Trust cancer info from friends or family?			Year 2003	2005	2007	Total
A lot	% within Year	Estimate	18.3%	22.8%	9.3%	16.8%
Some	% within Year	Estimate	49.4%	45.0%	50.1%	48.2%
A little	% within Year	Estimate	25.7%	26.3%	35.8%	29.4%
Not at all	% within Year	Estimate	6.6%	5.9%	4.7%	5.7%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 8

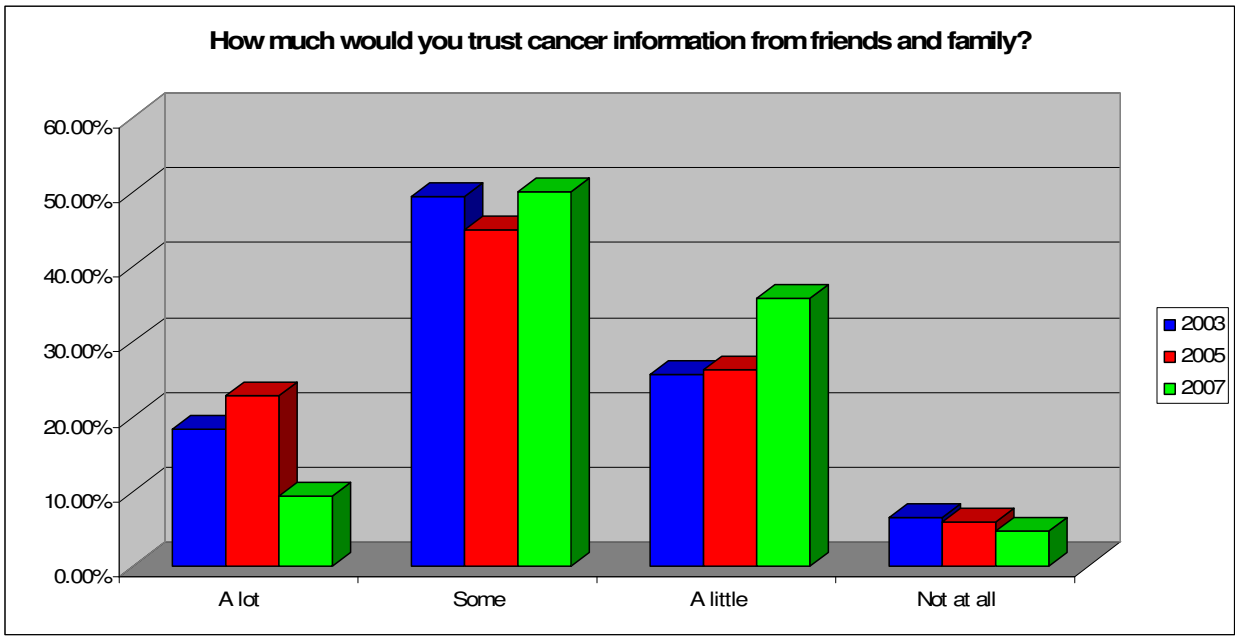

Figure 8

How much would you trust cancer information from newpapers or magazines?

Trust cancer info from newspapers or mag			Year 2003	2005	2007	Total
A lot	% within Year	Estimate	10.0%	18.9%	4.3%	10.7%
Some	% within Year	Estimate	49.1%	51.9%	42.9%	47.7%
A little	% within Year	Estimate	25.1%	21.3%	41.0%	29.6%
Not at all	% within Year	Estimate	15.8%	7.9%	11.9%	11.9%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 9

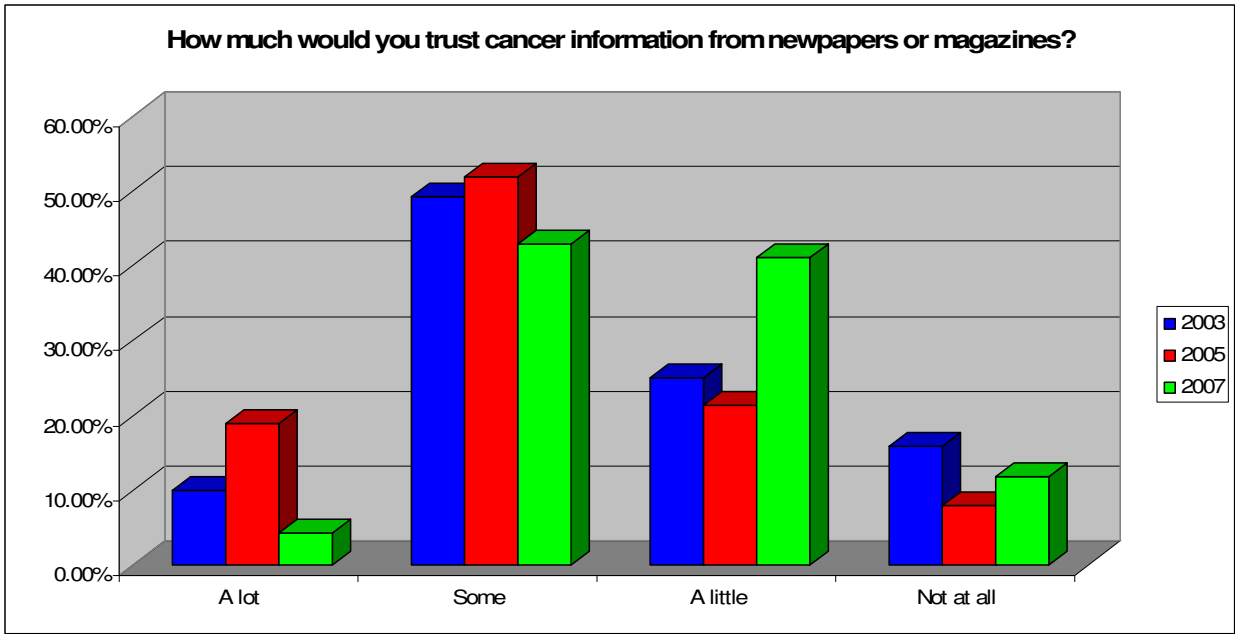

Figure 9

How much would you trust cancer information from radio?

Trust cancer info from the radio?			Year			
			2003	2005	2007	Total
A lot	% within Year	Estimate	9.5%	12.3%	2.3%	7.9%
Some	% within Year	Estimate	45.3%	45.7%	27.1%	39.1%
A little	% within Year	Estimate	25.9%	26.6%	45.5%	33.0%
Not at all	% within Year	Estimate	19.3%	15.4%	25.1%	20.1%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 10

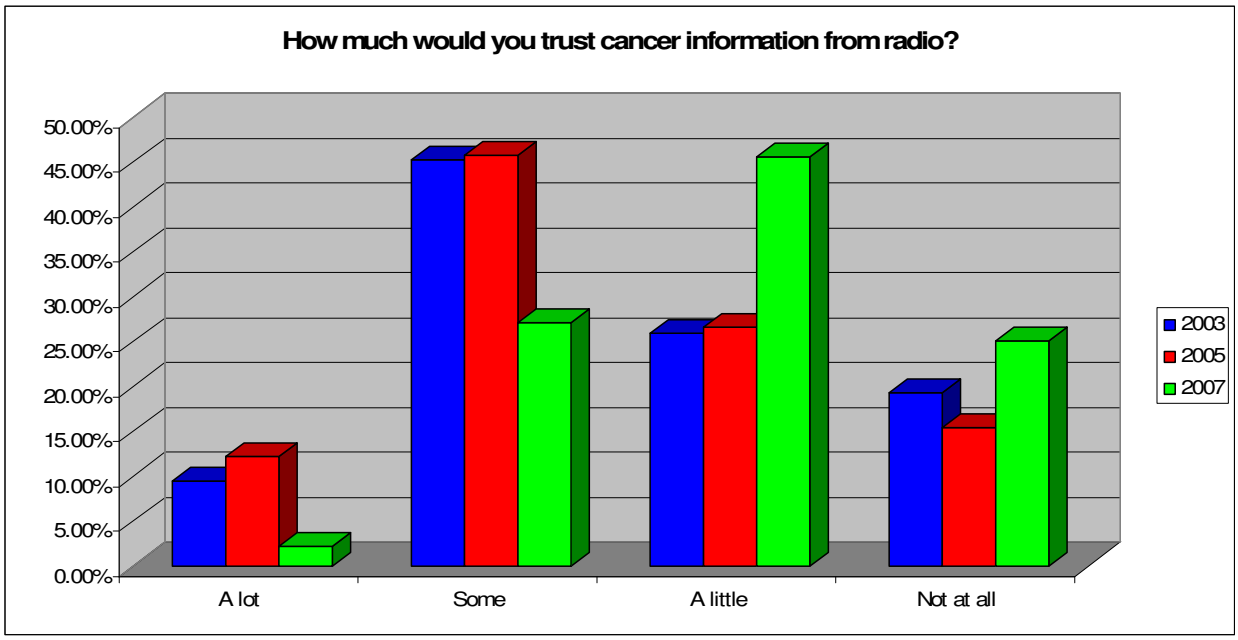

Figure 10

How much would you trust cancer information from Television?

Trust cancer info from television?			Year			
			2003	2005	2007	Total
A lot	% within Year	Estimate	19.1%	20.8%	5.7%	15.1%
Some	% within Year	Estimate	52.2%	51.2%	35.3%	46.0%
A little	% within Year	Estimate	21.2%	23.2%	42.0%	29.0%
Not at all	% within Year	Estimate	7.6%	4.9%	17.0%	9.9%
Total	% within Year	Estimate	100.0%	100.0%	100.0%	100.0%

Table 11

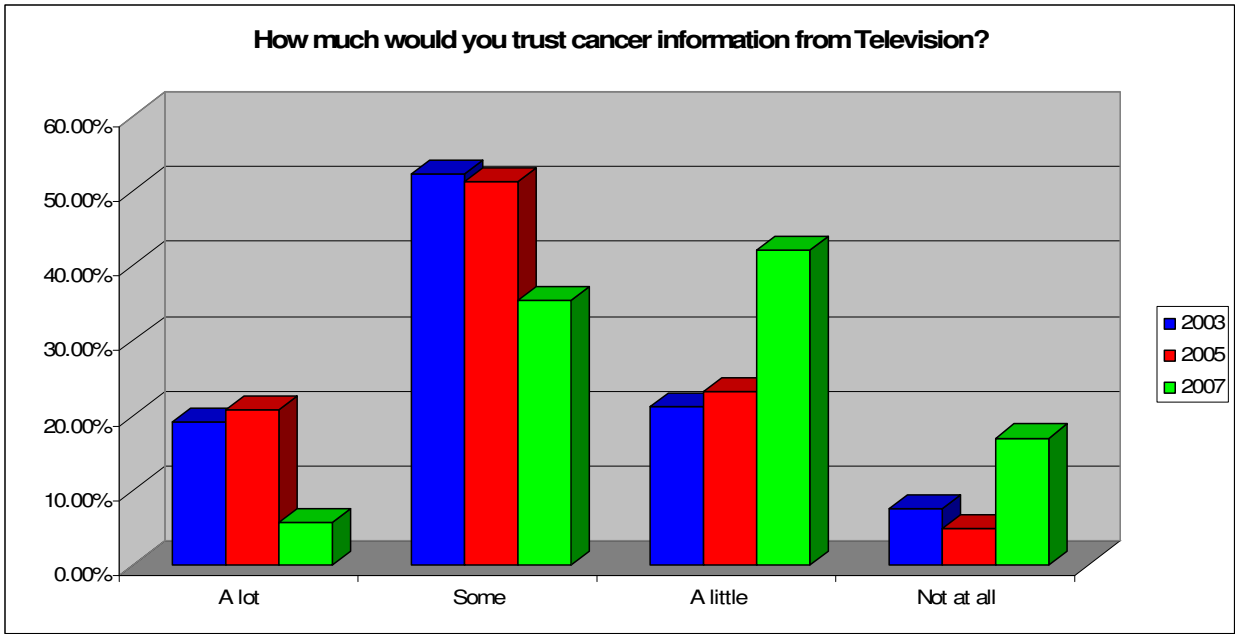

Figure 11

Summary of Trust in Cancer Sources

Source	Trust Level
Doctor	3.598
Internet	2.787
Friends/Family	2.763
Newspaper/Magazines	2.57
Radio	2.35
Television	2.663

Table 12

4= A lot of Trust
3= Some Trust
2=A Little Trust
1=Not At All Trustworthy

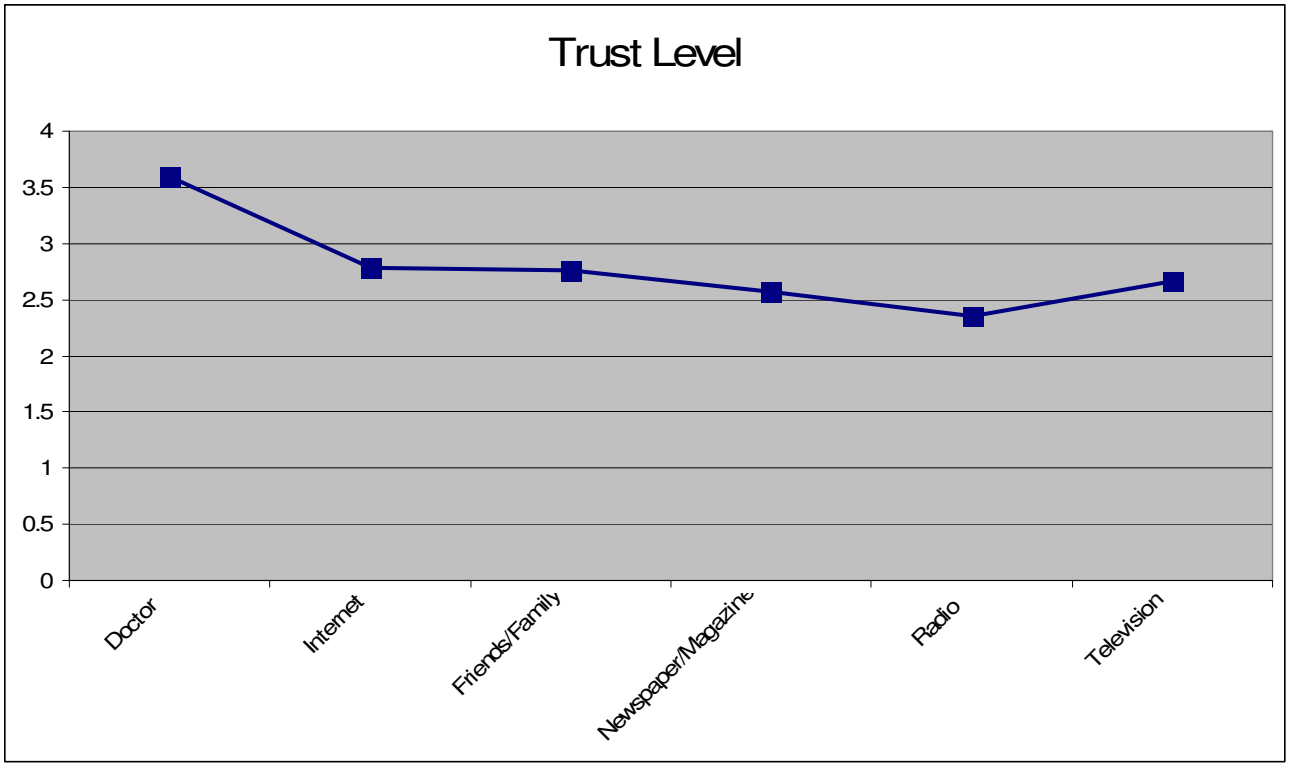

Figure 12